

Date: Tue, 20 Jul 93 04:30:09 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #878
To: Info-Hams

Info-Hams Digest Tue, 20 Jul 93 Volume 93 : Issue 878

Today's Topics:

 Daily Solar Geophysical Data Broadcast for 19 July
 How does an American sign in Canada? (2 msgs)
 Professional quality earphones - source?
 teletypes (2 msgs)
 TS-50, type-acceptance
 TS50 Illegal! (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 20 Jul 93 05:43:17 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 19 July
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 200, 07/19/93
10.7 FLUX=100.8 90-AVG=109 SSN=102 BKI=0102 1102 BAI=002
BGND-XRAY=B1.1 FLU1=7.0E+05 FLU10=1.4E+04 PKI=2212 1122 PAI=005
 BOU-DEV=004,009,004,011,006,006,004,015 DEV-AVG=007 NT SWF=00:000
 XRAY-MAX= B3.3 @ 0417UT XRAY-MIN= B1.0 @ 2155UT XRAY-AVG= B1.2
NEUTN-MAX= +004% @ 2210UT NEUTN-MIN= -001% @ 1415UT NEUTN-AVG= +0.7%
 PCA-MAX= +0.4DB @ 1540UT PCA-MIN= -0.2DB @ 1620UT PCA-AVG= +0.1DB
BOUTF-MAX=55378NT @ 1401UT BOUTF-MIN=55344NT @ 1802UT BOUTF-AVG=55367NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+080,+000,+000
GOES6-MAX=P:+135NT@ 1705UT GOES6-MIN=N:-061NT@ 0427UT G6-AVG=+102,-016,-042
 FLUXFCST=STD:115,110,105;SESC:115,110,105 BAI/PAI-FCST=015,020,020/015,025,018
 KFCST=2234 1444 3345 2344 27DAY-AP=006,013 27DAY-KP=1011 1233 3213 3243

WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 18 JUL 93 was 71.0.
The Full Kp Indices for 18 JUL 93 are: 1+ 1- 2- 2o 2- 2- 2o 2-

Date: Tue, 20 Jul 1993 03:44:30 GMT
From: rtech!amdahl!netcomsv!netcom.com!jfh@decwrl.dec.com
Subject: How does an American sign in Canada?
To: info-hams@ucsd.edu

plaws@uaafhp.uark.edu (Peter Laws) wrote:

>Can the US government force US citizens to obey US laws while they are not
>in the US?

The government can send troops into a foreign country and kidnap a citizen
of that country for trial in the United States, according to our laws (not
according to general international agreement, but might makes right).

>Even when those laws conflict/differ from the foreign country's laws?

I'm pretty sure that no country *requires* you to broadcast on a particular
frequency, since there's no law which says you have to broadcast at all.

This belongs in misc.legal, I suspect.

--

Jack Hamilton jfh@netcom.com kd6ttl@n0ary.#nocal.ca.us.na (AMPR)
Post Office Box Box 281107 San Francisco, California 94128 USA

Date: 19 Jul 1993 23:48 PST
From: usc!howland.reston.ans.net!agate!library.ucla.edu!news.mic.ucla.edu!
unixg.ubc.ca!erich.triumf.ca!bennett@network.ucsd.edu
Subject: How does an American sign in Canada?
To: info-hams@ucsd.edu

In article <Pine.3.07.9307191647.A12858-b1000000@uaafhp.uark.edu>,
plaws@uaafhp.uark.edu (Peter Laws) writes...

>So:

>

>Can the US government force US citizens to obey US laws while they are not
>in the US?

>

>Even when those laws conflict/differ from the foreign country's laws?

>

>

No. But the foreign country can make such requirements.

I believe _Canada_ (not the US) requires that US amateurs comply with their
(US) band limits, as well as the Canadian limits, while in Canada.

I recall some time ago that there was some action to have the DOC adjust the
rules so that Europeans could use 146 - 148 MHz in Canada, although they would
not be able to use that part of 2 metres at home.

Peter Bennett VE7CEI	Vessels shall be deemed to be in sight
Internet: bennett@erich.triumf.ca	of one another only when one can be
Bitnet: bennett@triumfer	observed visually from the other
TRIUMF, Vancouver, B.C., Canada	ColRegs 3(k)

Date: Tue, 20 Jul 1993 04:09:51 GMT
From: netcon!bongo!julian@locus.ucla.edu
Subject: Professional quality earphones - source?
To: info-hams@ucsd.edu

In article <CAEy70.KLL@ms.uky.edu> hgpeach@ms.uky.edu (Harold Peach) writes:

>I am looking for a source of professional quality earphones (i.e.,
>skin colored, coiled wire, SMALL, etc. The only thing RS seems to
>carry are these black jobs. They work fine, but are not very
>inconspicuous.

I have worn earphones professionally for years. I have never
seen a skin coloured pair. Also I recommend big headphones. They sound
better. The ones I use do not have coiled wire either. The wire is
steel and copper for strength.

My favourite brand is Sennheiser. The best open ones are the
HD 430. The best closed ones are HD-222. Other brands used
professionally are AKG (Philips) and Koss. You can buy these kind of
headsets in good high-fi stores and electronics stores and
distributors that supply the broadcast industry.

Now if you want a telephone headset, some of those are skin
coloured. The best are probably Plantronics. They cost around \$200
depending on model. But they will rebuild them for \$25.00, so they do

last forever. You can get telephone headsets from "Telecom distributors", they are usually in the Yellow pages. Plantronics will send you a brochure. I buy my headsets from Alltel (800) 634-9086. You can also buy them from Hello Direct (not cheap) (800) 444-3556.

Rebuilt headsets can be bought from Comfort telecommunications (813) 945-0288. They will sell a rebuilt headset with a 14 month guarantee.

Yes, all of the above are digital ready and will copy Morris.

--

Julian Macassey, N6ARE julian@bongo.tele.com Voice: (213) 653-4495
Paper Mail: 742 1/2 North Hayworth Avenue, Hollywood, California 90046-7142

Date: Tue, 20 Jul 1993 09:02:00 GMT
From: pipex!uknet!gdt!bsmail!siva.bris.ac.uk!ard@uunet.uu.net
Subject: teletypes
To: info-hams@ucsd.edu

In article <22f15fINNbea@topaz.bds.com>, ron@topaz.bds.com (Ron Natalie) writes...
>> 35,37 - basically more rugged/or with lower case ASCII machines. I have no
>> info on these.

>

>The 35 is a faster ASCII terminal that takes pinfeed paper and will do
>form feeds (This I found amusing back in my early computing days).

There was a sprocket-feed 33 with a formfeed mechanism, but I've never seen one. It's shown in the parts book, and I have some spares for it, so I guess it existed.

[37 description deleted]

>

>Anybody want an ASR-37 with all the tech manuals cheap?

Yes, but no way could I afford the shipping :-)

>

>-Ron

>

>

-tony

Date: Tue, 20 Jul 1993 08:59:00 GMT
From: pipex!warwick!bsmail!siva.bris.ac.uk!ard@uunet.uu.net
Subject: teletypes
To: info-hams@ucsd.edu

In article <22f35nINNbpt@rave.larc.nasa.gov>, kludge@grissom.larc.nasa.gov (Scott Dorsey) writes...

>In article <19JUL199320554768@siva.bris.ac.uk> ard@siva.bris.ac.uk (PDP11 Hacker) writes:

>>33 - The canonical teletype. ASCII, very mechanical, noisy :-), round keytops.
>>Versions include : R0-33 (no keyboard, printer only), KSR33 (keyboard and
>>printer, no paper tape), ASR33 (keyboard, printer, punch, reader). There were
>>also some specials, like detached keyboards, different character sets,
>>sprocket feed, etc.

>

>The 33 is the canonical teletype only for computer folks. The 33 was a
>very cheaply made machine, not intended for continuous duty service. As
>a result, it was picked up by a lot of minicomputer manufacturers to use
>as consoles. A seemingly enormous number of the things were sold in the
>seventies, and as a result they turned up surplus in record numbers in
>the eighties. They aren't really typical teletypes at all.

Ooops... My minicomputer background is showing up again. Yes, the 33 was a cheap machine, sold to many manufacturers (DEC, Philips, etc...) as a console for their minis, and for that reason it is the one shown in nearly all computer books, the one that turns up in computer cartoons, and by far the most common one at uk hamfests (I'm not including Creed machines in that statement).

But, if you look after them, keep them oiled, etc, they will run for a very long time (both of mine are still running on all original parts, even though I have spare bearings, motor, shafts, etc for them).

>--scott

>--

>"C'est un Nagra. C'est suisse, et tres, tres precis."

-tony

Date: 19 Jul 1993 23:54 PST
From: sdd.hp.com!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!agate!
library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!erich.triumf.ca!
bennett@network.ucsd.edu
Subject: TS-50, type-acceptance
To: info-hams@ucsd.edu

In article <1993Jul19.184808.107207@locus.com>, dana@lando.la.locus.com (Dana H. Myers) writes...

>In article <22ei3e\$d50@cville-srv.wam.umd.edu> ham@wam.umd.edu (Scott Richard Rosenfeld) writes:

>>I think that the point here is that maybe Kenwood forgot (?) to install
>>a diode in the radio that prevents it from transmitting out of the ham
>>bands "OUT OF THE BOX."

>

>[remainder deleted]

>

I would be surprised if selling a radio capable of operating outside the ham bands was illegal, since it was not until the advent of microprocessor controlled, frequency synthesized radios that it was even possible to make a radio with hard band limits.

My original HF rig, a TS-820, would tune a short distance outside the bands as manufactured, simply because that's the way the dial mechanism worked.

Peter Bennett VE7CEI	Vessels shall be deemed to be in sight
Internet: bennett@erich.triumf.ca	of one another only when one can be
Bitnet: bennett@triumfer	observed visually from the other
TRIUMF, Vancouver, B.C., Canada	ColRegs 3(k)

Date: 20 Jul 93 03:22:24 GMT

From: usc!howland.reston.ans.net!darwin.sura.net!news-feed-1.peachnet.edu!concert!
duke!news.duke.edu!ee.ee.duke.edu!jbs@network.ucsd.edu

Subject: TS50 Illegal!

To: info-hams@ucsd.edu

In article <1993Jul19.225650.22555@cyphyn.UUCP> randy@cyphyn.UUCP (Randy) writes:
> 1st...sence when has the FCC had to 'type accept' a Ham rig?

Part 97.307 says all equipment must meet FCC standards for spectral purity. Check the back panel of any recent rig for the FCC ID number. The FCC doesn't allow manufacturers to market amplifiers capable of out-of-the-box operation on 10m if there is not circuitry present to prevent operation on 11m. Thank the illegal CB operators for that one. All RF external amplifiers capable of operation below 144MHz must be type-accepted to be commercially marketed (97.315). Other ham gear does not have to be type accepted to be marketed commercially.

>Now...what exactly,was the reason for all those fines then?

> Did they sell the rigs to chicken banders?

I suspect you hit the nail on the head.

-joe

--

You spend the night
Like you were spending a dime
- Lyle Lovett

Date: 20 Jul 93 03:41:01 GMT
From: walter!porthos!dancer!whs70@RUTGERS.EDU
Subject: TS50 Illegal!
To: info-hams@ucsd.edu

In article <1993Jul19.225650.22555@cyphyn.UUCP> randy@cyphyn.UUCP (Randy) writes:
Stuff about type acceptance of TS-50 deleted....

>

> 1st...sence when has the FCC had to 'type accept' a Ham rig?

>That 'type acceptance' is for chicken band gear!

The FCC does "type acceptance" on "commercial" ham rigs.
I don't know when that may have started, but it is the
normal process by which new equipment is first checked
out before being available.

> If the acceptance concerns the spectral output of the rig, THEN maybe
>it would make sense.

> But here it's about the freq coverage a rig has....and boy oh boy, a LOT
>of Hams are in hot water.....how about the home made rigs?

> NONE are 'type accepted' and some can very easily tune ANY where!

>And what about the older rigs like Viking Rangers and V32's and KWM-2's ?

There is no requirement that "home brew" rigs be type accepted, nor is
there any "retroactive" requirement for type acceptance of older/used
rigs.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)
Morristown, NJ email via UUCP bcr!cc!whs70
201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

Date: 20 Jul 1993 06:03:25 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!darkstar.UCSC.EDU!cats.ucsc.edu!
haynes@network.ucsd.edu

To: info-hams@ucsd.edu

References <19JUL199320554768@siva.bris.ac.uk>, <22f15fINNbea@topaz.bds.com>,
<22fggbINNbbt@life.ai.mit.edu>
Subject : Teletype models (long)

Since someone mentioned "canonical" we might as well go through as much of the list as I can remember.

R0 = receive only

KSR = keyboard send/receive

ASR = automatic send/receive, which usually means paper tape

- 12 - page machine. These were used by amateurs, especially in New York in the early 50s. Type bars, like an old typewriter. 60WPM.
- 14 - tape strip printer, KSR or R0. Used mainly by Western Union (which called it the 2-B) Also the printer is the basis of a typing reperforator. The tape reader XD is also usually considered part of the Model 14 line, and sometimes the GPE perforator. Type bars. 60 WPM. (66 WPM in the Western Union version, with 7.0 unit code; but 45.45 baud in either case.)
- 15 - page printer, KSR or R0. Made from about 1930 until the mid-1950s, these were the mainstay of the news wire services and the military until the Model 28 came out. You'll still hear radio stations use the sound effects of a Model 15 as background when they are reading the news. Uses type bars, but unlike a typewriter the paper is stationary and the type bar "basket" moves across the page. 60 and 75 WPM. FAA ran some of these at 100 WPM experimentally but they required too much maintenance at that speed.
- 19 - ASR set, consists of Model 15 printer, XD tape reader, and the keyboard is basically Model 15 but has a tape perforator attached.
- 20 - page printer, similar to Model 15 but uses 6-level code and prints upper/lower case in Teletypesetter code.
- 21A - A Western Union tape printer, parallel wire input, used on multiplex circuits. Type bars.
- 26 - A light-duty page printer KSR made in the late 1930s. A lot of these wound up in amateur hands in the 1950s, especially in California, as the telephone companies replaced them with Model 15s or 28s. Used a type wheel holding individual type slugs. The paper platen moved from side to side. The 26 failed as a product because it was not sufficiently cheaper than the 15 to justify stocking parts and having maintenance expertise for it and the Model 15. 60 WPM.
- 28 - A heavy-duty page printer introduced in the early 1950s. Used a moving type box holding individual type slugs. First production all went to the military; it was popular with the Navy because unlike the 15 it was not bothered by the ship pitching and rolling. In fact there was a demo setup of a printer in gimbals to show that it could operate

in any position. Capable of 100 WPM. ASR version introduced in late 1950s.

- 29 - Based on the 28, but made to work with 6-level code based on IBM BCD. Supposedly used only internally within Western Electric.
- 31 - A lightweight tape printer KSR for portable use. Western Union used them for reporting baseball games.
- 32 - Early 1960s era light duty low cost machine for 5 level code.
- 33 - Same as 32 but 8-level ASCII code (upper case only). These machines were made in R0, KSR, and ASR versions. The ASR 33 became very popular as a cheap computer console device. 32s were mostly used by Western Union in Telex service; 33s were used by Bell System in Dial TWX service. 100WPM max. Both noted for lousy keyboard touch, the 33 being worse than the 32 because it had to generate more bits. Cost of the printers was held down by not using plated and hardened parts; adjustment was often by bending parts rather than loosening and tightening adjusting screws. The printer used a stationary platen and a molded type cylinder. This printing mechanism was used earlier in Model 28 typing reperforators.
- 35 - A reworking of the 29 to use ASCII code, more "modern" cabinet similar to the 32/33 line, heavy-duty like the 28/29, available in R0, KSR, ASR versions. 100 WPM max. Some use as computer consoles where better reliability was needed than was possible with the 33.
- 37 - Was to have been the mainstay of the product line had AT&T remained in one piece and not sold off TWX to Western Union. 150 WPM, upper/lower case ASCII, online settable tabs, the works. Not enough were produced to get the early reliability problems out of it; it was very costly; and it had a terrible keyboard based on the 32/33 design. Type box similar to 28/35 but larger to accommodate the full ASCII character set.
- 38 - Was to have been an upper/lower case version of the 33 - but then somebody decided it should take 14" wide paper. Stretching the width introduced some reliability problems that were never fixed. Used the same despicable keyboard as the 37. 100WPM max.
- 40 - A product line that included CRT terminals and some printers based on chain principle. Printers available in 80 or 132 column models, up/low case or upper only, speed depends on character set and nature of printing but 2400 WPM is usually possible.
- 43 - Dot matrix small R0 or KSR, nice electronic keyboard. Up to 300 WPM.
- GPE - old tape perforator, called the "iron horse", often seen in amateur stations (as a door stop).
- DPE - slightly more modern perforator, the keyboard and perforator mechanism of the Model 19, less the keyboard signal generator.
- Inktronic - an ink jet printer. Unlike the modern successful ones this beast electrostatically deflected ink droplets from 40 nozzles (each nozzle serving two column positions). Produced in R0 and KSR models, the KSR using the same vile keyboard as the Model 37 and 38. 1200 WPM, upper/lower case. When the printer was new the copy was readable, and went inexorably downhill after that.

High speed products: tape readers BX, CX, and DX (suggests there was an AX at one time), perforators BRPE and DRPE, capable of 1200 and 2400 WPM respectively.

100-series - Western Union occasionally dabbled with making its own machines. These were page printers with type baskets, 60 wpm.

Kleinschmidt - semi-competitor to Teletype, specialized in machines for the military market.

MITE - another company that got into the business in the 60s producing a very compact light weight machine for the military.

Extel - some former Teletype people (hence the name, ex-Teletype) formed a company to make dot matrix printers, sold principally to the news wire services.

--

haynes@cats.ucsc.edu

haynes@cats.bitnet

"Ya can talk all ya wanna, but it's dif'rent than it was!"

"No it aint! But ya gotta know the territory!"

Meredith Willson: "The Music Man"

Date: Tue, 20 Jul 1993 09:15:00 GMT

From: pipex!warwick!bsmail!siva.bris.ac.uk!ard@uunet.uu.net

To: info-hams@ucsd.edu

References <22f15fINNbea@topaz.bds.com>, <22fggbINNbbt@life.ai.mit.edu>,

<22g1rdINNfm4@darkstar.UCSC.EDU>

Subject : Re: Teletype models (long)

In article <22g1rdINNfm4@darkstar.UCSC.EDU>, haynes@cats.ucsc.edu (Jim Haynes) writes...

>

>Since someone mentioned "canonical" we might as well go through as much
>of the list as I can remember.

>

>R0 = receive only

>KSR = keyboard send/receive

>ASR = automatic send/receive, which usually means paper tape

[Rest of list deleted to same bandwidth]

>

>26 - A light-duty page printer KSR made in the late 1930s. A lot of these
> wound up in amateur hands in the 1950s, especially in California, as
> the telephone companies replaced them with Model 15s or 28s. Used a
> type wheel holding individual type slugs. The paper platen moved

> from side to side. The 26 failed as a product because it was not
> sufficiently cheaper than the 15 to justify stocking parts and having
> maintenance expertise for it and the Model 15. 60 WPM.
Sounds a bit like the UK Creed 7

BPRE - High speed (up to 110 cps) 8-track tape punch. Also badged as the Data
Dynamic 1110 (In a nice cabinet with smoked plastic front and lamps to
illuminate the mechanism). Solid, reliable, and a pain to set up!.

>Kleinschmidt - semi-competitor to Teletype, specialized in machines for
> the military market.

Creed - UK manufacture of teleprinters and related equipment
(punches/readers/etc). I'll list the 2 models I have, and let others fill in
the gaps.

7E - 5 bit murray code, with fixed printhead (64-position wheel with slugs
round it and bell-cranks to lock it in the right position for a particular
character. Multiply-grooved cams in the receiver mechanism, and a 3-row
keyboard with answer-back drum on the right.

444 - Still made until relatively recently (mid 80's ?) as a telex machine.
type basket moving along rails for printhead, 4-row keyboard (keys mechanically
blocked in wrong figs/lets shift mode), paper tape punch on left of printer,
reader on right of keyboard. 5-bit baudot.

>MITE - another company that got into the business in the 60s producing
> a very compact light weight machine for the military.
>Extel - some former Teletype people (hence the name, ex-Teletype) formed
> a company to make dot matrix printers, sold principally to the news
> wire services.

>

>--

>haynes@cats.ucsc.edu

>haynes@cats.bitnet

>

>"Ya can talk all ya wanna, but it's dif'rent than it was!"

>"No it aint! But ya gotta know the territory!"

> Meredith Willson: "The Music Man"

>

-tony

End of Info-Hams Digest V93 #878
